

### THIR UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHAVE COME:

Board of Superbisors of Louisiana State University and A&M College; and Florida Agricultural Experiment Station

JUCCENS, THERE HAS BEEN PRESENTED TO THE

### Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY TARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC SENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR UNG IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE POSSES, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROTECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

OAT

'Trophy'

In Tratimonn Marcol, I have hereunto set my hand and caused the seal of the Hant Haristy Frotection Office to be affixed at the City of Washington, D.C. this seventh day of December, in the year two thousand and seven.

Allest:

Olar San

Commissioner Plant Variety Protection Office Agricultural Marketing Service Camara T. Sarrafu

Secretary of Agriculture

#### U.S. DEPARTMENT OF AGRICULTURE The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995. AGRICULTURAL MARKETING SERVICE SCIENCE AND TECHNOLOGY - PLANT VARIETY PROTECTION OFFICE Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426). APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE (Instructions and information collection burden statement on reverse) 1. NAME OF OWNER TEMPORARY DESIGNATION OR 3. VARIETY NAME EXPERIMENTAL NAME Board of Supervisors of the Louisiana State University and A&M College; and Florida Agricultural Experiment Station LA9810SBS-58 TROPHY 4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country) 5. TELEPHONE (include area code) FOR OFFICIAL USE ONLY LSU AgCenter (225) 578-2110 #200700421 104 J. Norman Efferson Hall 6. FAX (include area code) PO Box 25055 Baton Rouge, LA 70894 (225) 578-1403 THE OWNER NAMED IS NOT A "PERSON", GIVE FORM OF 8. IF INCORPORATED, GIVE 9. DATE OF INCORPORATION AUGUST 24, 2007 ORGANIZATION (corporation, partnership, association, etc.) STATE OF INCORPORATION landgrant university 10. NAME AND ADDRESS OF OWNER REPRESENTATIVE(S) TO SERVE IN THIS APPLICATION. (First person listed will receive all papers) FILING AND EXAMINATION FEES: : 4382.00 Dr. Stephen A. Harrison LSU School of Plant, Environmental & Soil Sciences RECEIV 104 MB Sturgis Hall Baton Rouge, LA 70803-2110 Е 10-22-2007 11. TELEPHONE (Include area code) 12. FAX (include area code) 13. E-MAIL (225) 578-2110 (225) 578-1403 sharrison@agctr.lsu.edu 14. CROP KIND (Common Name) 16. FAMILY NAME (Botanical) 18. DOES THE VARIETY CONTAIN ANY TRANSGENES? (OPTIONAL) oat Poaceae ☑ NO IF SO, PLEASE GIVE THE ASSIGNED USDA-APHIS REFERENCE NUMBER FOR THE 15. GENUS AND SPECIES NAME OF CROP 17. IS THE VARIETY A FIRST GENERATION HYBRID? APPROVED PETITION TO DEREGULATE THE GENETICALLY MODIFIED PLANT FOR ☐ YES ☑ NO Avena sativa 19. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE SOLD AS A CLASS OF CERTIFIED SEED? (See Section 83(a) of the Plant Variety Protection Act) (Follow instructions on reverse) DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF CLASSES? a. Exhibit A. Origin and Breeding History of the Variety YES (If "yes", answer items 21 and 22 below) INO (If "no", go to item 23) b. Exhibit B. Statement of Distinctness YES c. Exhibit C. Objective Description of Variety ✓ NO d. Exhibit D. Additional Description of the Variety (Optional) IF YES, WHICH CLASSES? ☐ FOUNDATION ☐ REGISTERED ☐ CERTIFIED DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO e. 🗾 Exhibit E. Statement of the Basis of the Owner's Ownership NUMBER OF GENERATIONS? Voucher Sample (2,500 viable untreated seeds or, for tuber propagated varieties, ☐ YES ₩ NO verification that tissue culture will be deposited and maintained in an approved public IF YES, SPECIFY THE NUMBER 1,2,3, etc. FOR EACH CLASS. g. V Filing and Examination Fee (\$3,652), made payable to "Treasurer of the United ☐ FOUNDATION ☐ REGISTERED ☐ CERTIFIED States" (Mail to the Plant Variety Protection Office) (If additional explanation is necessary, please use the space indicated on the reverse.) 23. HAS THE VARIETY (INCLUDING ANY HARVESTED MATERIAL) OR A HYBRID PRODUCED FROM THIS VARIETY BEEN SOLD, DISPOSED OF, TRANSFERRED, OR USED IN THE U. S. OR OTHER COUNTRIES? IS THE VARIETY OR ANY COMPONENT OF THE VARIETY PROTECTED BY INTELLECTUAL PROPERTY RIGHT (PLANT BREEDER'S RIGHT OR PATENT)? YES NO ☐ YES NO NO IF YES, YOU MUST PROVIDE THE DATE OF FIRST SALE, DISPOSITION, TRANSFER, OR USE FOR EACH COUNTRY AND THE CIRCUMSTANCES. (Please use space indicated on reverse.) IF YES, PLEASE GIVE COUNTRY, DATE OF FILING OR ISSUANCE AND ASSIGNED REFERENCE NUMBER. (Please use space indicated on reverse.) 25. The owners declare that a viable sample of basic seed of the variety has been furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate The undersigned owner(s) is(are) the owner of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 42, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act. Owner(s) is (are) informed that false representation herein can jeopardize protection and result in penalties. SIGNATURE OF OWNER SIGNATURE OF OWNER NAME (Please print or type)

(See reverse for instructions and information collection burden statement)

08/17/2007

DATE

Stephen A. Harrison

CAPACITY OR TITLE

breeder - Professor

DATE

08/17/2007

Stephen A. Harrison

breeder - Professor

CAPACITY OR TITLE

#### INSTRUCTIONS

GENERAL: To be effectively filed with the Plant Variety Protection Office (PVPO), ALL of the following items must be received in the PVPO: (1) Completed application form signed by the owner; (2) completed exhibits A, B, C, E; (3) for a seed reproduced variety at least 2,500 viable untreated seeds, for a hybrid variety at least 2,500 untreated seeds of each line necessary to reproduce the variety, or for tuber reproduced varieties verification that a viable (in the sense that it will reproduce an entire plant) tissue culture will be deposited and maintained in an approved public repository; (4) check drawn on a U.S. bank for \$3,652 (\$432 filling fee and \$3,220 examination fee), payable to "Treasurer of the United States" (See Section 97.6 of the Regulations and Rules of Practice.) Partial applications will be held in the PVPO for not more than 90 days, then returned to the applicant as unfiled. Mail application and other requirements to Plant Variety Protection Office, AMS, USDA, Room 401, NAL Building, 10301 Baltimore Avenue, Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the application are self explanatory unless noted below. Corrections on the application form and exhibits must be initialed and dated. DO NOT use masking materials to make corrections. If a certificate is allowed, you will be requested to send a check payable to "Treasurer of the United States" in the amount of \$432 for issuance of the certificate. Certificates will be issued to owner, not licensee or agent.

Plant Variety Protection Office Telephone: (301) 504-5518 FAX: (301) 504-5291

Homepage: http://www.ams.usda.gov/science/pvpo/pvpindex.htm

To avoid conflict with other variety names in use, the applicant must check the appropriate recognized authority and provide evidence that name has been cleared by the appropriate recognized authority before the Certificate of Protection is issued. For example, for agricultural and vegetable crops, contact: Seed Branch, AMS, USDA, 10301 Baltimore Avenue, Suite 401 NAL Building, Beltsville, MD 20705. Telephone: (301) 504-5682 http://www.ams.usda.gov/lsg/seed.htm.

#### ITEM

- 19a. Give:
- (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method;
- (2) the details of subsequent stages of selection and multiplication;
- (3) evidence of uniformity and stability; and
- (4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified
- 19b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If the new variety is most similar to one variety or a group of related varieties:
  - (1) identify these varieties and state all differences objectively;
  - (2) attach statistical data for characters expressed numerically and demonstrate that these are clear differences; and
  - (3) submit, if helpful, seed and plant specimens or photographs (prints) of seed and plant comparisons which clearly indicate distinctness.
- 19c. Exhibit C forms are available from the PVPO Office for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.
- 19d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.
- 19e. Section 52(5) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. An Exhibit E form is available from the PVPO.
- 20. If "Yes" is specified (seed of this variety be sold by variety name only, as a class of certified seed), the applicant MAY NOT reverse this affirmative decision after the variety has been sold and so labeled, the decision published, or the certificate issued. However, if "No" has been specified, the applicant may change the choice. (See Regulations and Rules of Practice, Section 97.103).
- 23. See Sections 41, 42, and 43 of the Act and Section 97.5 of the regulations for eligibility requirements.
- 24. See Section 55 of the Act for instructions on claiming the benefit of an earlier filing date.

22. CONTINUED FROM FRONT (Please provide a statement as to the limitation and sequence of generations that may be certified.)

none

23. CONTINUED FROM FRONT (Please provide the date of first sale, disposition, transfer, or use for each country and the circumstances, if the variety (including any harvested material) or a hybrid produced from this variety has been sold, disposed of, transferred, or used in the U.S. or other countries.)

October 5, 2006. commercial sale.

24. CONTINUED FROM FRONT (Please give the country, date of filing or issuance, and assigned reference number, if the variety or any component of the variety is protected by intellectual property right (Plant Breeder's Right or Patent).)

none

**NOTES:** It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of ownership or assignment or owner's representative during the life of the application/certificate. The fees for filing a change of address; owner's representative; ownership or assignment; or any modification of owner's name is specified in Section 97.175 of the regulations. (See Section 101 of the Act, and Sections 97.130, 97.131, 97.175(h) of the Regulations and Rules of Practice.)

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 1.4 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, sexual orientation, marital or family status, political beliefs, parental status, or protected genetic information. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202-720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call 202-720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

# Trophy Oat Exhibit A Origin and Breeding History

**Trophy is a new winter oat variety** that was co-developed by the Louisiana State University Agricultural Center (LSUAC) and Florida Agricultural Experiment Station. Trophy was tested as LA9810SBS-58 oat, hereafter referred to as LA9810 or Trophy. Exclusive marketing rights for Trophy have been licensed to Terral Seed Inc. of Lake Providence, LA. The LSUAC will be the lead institution in this release.

#### Pedigree:

Trophy is derived from the cross: LA90120C2-3-AB1/TX96M1558.

It was the 10<sup>th</sup> cross made by the LSU AgCenter oat breeding program in 1998 (hence LA9810)

LA90120C2-3-AB1 is an unreleased LSUAC breeding line selected from the original cross X506 made by Howard Harrison of the Coker's Pedigreed Seed Company breeding program and donated to the USDA when that program was closed.

LA90120C2-3-AB1 has the pedigree: Coker 75-27/Coker 76-29/3/Coker 76-23//Coker 75-28/CI8336/4/Coker 76-30/Coker 76-29.

Coker 76-30 was released and marketed as Southern States 7630 (PVP8200078).

All other lines are non-released. In each case, the first number (before the dash) indicates the year in which this lines was in a quarter-acre increase block for possible release. All lines date back to the mid 1970's.

TX96M1558 was developed by the Texas A&M oat breeding program under the direction of Dr. Milton McDaniel that was not released. It was entry 134 in the 1996-97 REGOAT (Regional Oat Nursery) coordinated by the LSU AgCenter small grains program.

It has the pedigree: TX83AB2923/Ga-Mitchell. Ga-Mitchell is a University of Georgia variety released in 1991 (Crop Sci Reg No CV-225, PI549113).

#### **Breeding History:**

NOTE: Years refer to harvest year. The growing cycle 1997-98 is referred to as 1998.

1998: LA9810 was the 10<sup>th</sup> cross made in the spring of 1998 as part of the LSU AgCenter small grain breeding program based in Baton Rouge, LA.

- 1998: The F1 seed (LA9810) were grown in a summer nursery at the USDA Small Grains and Potato Germplasm Research Unit in Aberdeen, ID in the summer of 1998. There was no selection.
- 1999: The F2 population (LA9180S) was grown as a thinly-planted bulk at the Ben Hur Research Farm in 1999 (harvest year). It was selected for crown and stem rust resistance and agronomic type. Selected plants were harvested in bulk from the F2 plots.
- 1999: An F3 bulk (LA9810SB) was grown in Aberdeen during the summer of 1999. Single heads were pulled from this plot and individually threshed to become F4 headrows. LA9810SBS-58 is derived from the 58<sup>th</sup> individual head selected from that population.
- 2000: An F4 headrow (LA9810SBS-58) was grown at the Ben Hur Research Farm in 2000. This headrow was selected on the basis of maturity, plant type, disease resistance, and uniformity. The entire headrow was harvested.
- 2001: LA9810SBS-58 was grown in non-replicated oat observation plot number 33. It was selected for uniformity, maturity, tillering, crown and stem rust resistance, lodging resistance, grain yield, and test weight. The observation plot was rogued several times to remove any offtypes.
- 2002: LA9810SBS-5 evaluated in Oat Prelim-A at two locations in Louisiana and in the REGOAT headrow nursery in several states. Initial seed increase began this year.
- 2003-05: LA9810SBS-10 was tested in statewide variety trials and seed increase and purification continued.

2005: A release decision was made.

#### Selection and Observed Characters

LA9810SBS-98 is derived from an F<sub>4</sub> headrow. Selection criteria is outlined above and included selection for crown and stem rust resistance and plant type in each generation. The variety has been shown to be true-breeding across multiple generations and environments.

#### Stability:

The variety has been observed to be stable and uniform across multiple locations from 2001 through 2007 (seven generations).

#### Variants

The variety has a low frequency of variants that include:

1. Slightly taller (up to 9 cm) variants occur at up to 0.05% frequency.

# Exhibit B Novelty Statement Trophy Oat

Trophy is most similar to Harrison oat. They have similar upright leaves that protrude above the heads at heading. Harrison has wide (20 mm) dark green (RHS 137AB) leaves. Trophy has slightly wider leaves (23 mm) and the leaf color is also RHS 137A. They have similar heights and heading dates, and relatively narrow panicles with ascending branches.

Harrison had an average heading date of 103 across six locations in the 2005 USDA Uniform Winter Oat Yield Nursery whereas Trophy had a heading date of 102. Harrison and Trophy had heights of 49" and 46", respectively across those trials in Louisiana. In the 2004 UWOYN Harrison had a heading date of 106.0 and Trophy had a heading date of 107.6. Their respective heights were 40.9" and 40.6".

Trophy differs from Harrison in that it has better crown and stem rust resistance. In the 2005 UWOYN Trophy has 0 crown rust across all three locations where crown rust occurred. In the same trials Harrison had 63%, 58% and 5 (0-9 scale) for crown rust. In the 2004 UWOYN Harrison averaged 26% crown rust whereas Trophy average 0% crown rust. Trophy has a stem rust rating of 0 (0-9 scale) whereas Harrison had a rating of 1.3

Trophy has much larger seed (36.0 grams/1000) than Harrison (29.0 grams/1000). Seed of Harrison have a grayish color (RHS 164C) whereas those of Trophy are deep tan (RHS 161A).

|   | DISEASE AND OTHER TRAITS |            |           |           |               |            |             |
|---|--------------------------|------------|-----------|-----------|---------------|------------|-------------|
| ŀ <del>, -, -</del>   |                          |            | <u> </u>  | T         |               |            |             |
|   |                          | Crown Rust |           | BYDV      | Freeze Damage | Phenotype* |             |
|   |                          | Quincy     | Plains    | BRouge    | Prattville    | Kinston    | Baton Rouge |
| · ·   |                          | FL         | <u>GA</u> | <u>LA</u> | <u>AL</u>     | <u>NC</u>  | <u>LA</u>   |
| Entry   | Designation              | %          | 0-9       | %         | 0-9           | 0-9        | 0-9         |
| 1   | Rodgers                  | 73         | 9         | 100       | 3             | 2.5        | 7.0         |
| 2   | TAM-O-397                | 3          | 0         | 43        | 3             | 6.0        | 4.6         |
| 3   | Harrison                 | 63         | 5         | 58        | 5             | 3,5        | 5.6         |
| 4   | ARO231-3                 | 67         | 9         | 98        | 3             | 5.0        | 6.4         |
| 5   | ARO289-9                 | 80         | 9         | 100       | 3             | 3.5        | 7.5         |
| 6   | ARO336-3                 | 83         | 9         | 100       | 1             | 3.5        | 8.1         |
| 7   | ARO336-12                | 77         | 9         | 95        | 1             | 4.0        | 7.9         |
| 8   | FL9304-Y11-B3-C5         | 0          | 0         | 38        | 1             | 4.0        | 4.0         |
| 9   | FL9605-Ab-B4             | 7          | 0         | 50        | 1             | 3.5        | 5.5         |
| 10  | FL98107-C3               | 3          | 0         | 95        | 1             | 4.0        | 6.9         |
| 11  | FL-TX96M1418-C2          | 0          | 0         | 0         | 1             | 5.0        | 4.5         |
| 12  | LA96006BSB-270-S2        | 0          | 0         | 0         | 2             | 6.0        | 3.3         |
| 13  | LA976GBS-22-B-S2         | 0          | 0         | 0         | 3             | 5.5        | 3.9         |
| 14  | LA98001SBSBSB-82-S       | 33         | 7         | 15        | 1             | 2.0        | 4.6         |
| 15  | LA9810SBS-58             | 0          | 0         | 0         | i             | 4.5        | 3.4         |
| 16  | LA9825SBSB-59-C          | 10         | 0         | 10        | 2             | 5.0        | 4.0         |
| 17  | LA99016SBSB-98-S         | 0          | 0         | 0         | 1             | 4.5        | 3.9         |
| 18  | NC98-197N (hulless)      | 60         | 0         | 100       | 2             | 3.0        | 6.5         |
| 19  | NC01-3981                | 23         | 5         | 95        | 1             | 3.0        | 5.8         |
| 20  | SC010907                 | 73         | 9         | 100       | 3             | 3.5        | 7.5         |
| 21  | TX01CSRH sel I           | 0          | 0         | 0         | 4             | 5.0        | 3.5         |
| 22  | TX02U7097                | Ó          | 0         | 0         | 1             | 6.5        | 3.8         |
| 23  | TX02U7344                | 0          | 0         | 0         | 1             | 5.0        | 3.9         |
| 24  | TX02U7605                | 3          | 0         | 0         | 5             | 4.0        | 3.5         |
|   | Mean                     | 28         | 3.0       | 46.0      | 2.1           | 4.3        | 5.2         |
|   | LSD (5%)                 | -          | _         | 14        |               | 1.2        | 0.8         |
|   | CV (%)                   | _          | ****      | 17        | _             | 14.4       | 9.1         |
| Phenotype rated by S. Harrison in Baton Rouge, LA, where 0=excellent visual appearance; 5=average, and 9=very poor. |                          |            |           |           |               |            |             |

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U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE SCIENCE AND TECHNOLOGY PLANT VARIETY PROTECTION OFFICE BELTSVILLE, MD 20705 Exhibit C

### OBJECTIVE DESCRIPTION OF VARIETY Oat (Avena spp.)

| NAME OF APPLICANT (S)   | TEMPORARY OR EXPERIMENTAL DESIGNATION                      | VARIETY NAME                      |
|---|--|-----------------------------------|
| Board of Supervisors of the Louisiana State University and A&M College; and Florida Agricultural Experiment Station | LA9810SBS-58   | Trophy                            |
|   |  |                                   |
| ADDRESS (Street and No. or RD No., City, State, Zip Code, and<br>LSU AgCenter<br>104 J. Norman Efferson Hall        | Country)   | FOR OFFICIAL USE ONLY PVPO NUMBER |
| PO Box 25055<br>Baton Rouge, LA 70894   |  | #200700421                        |
|   | rietal character of this variety in the boxes below. Place | e a zero in the first box         |
| 1. SPECIES:   | WALLES   |                                   |
|   | 3 = Other (Specify)  |                                   |
| 2. GROWTH HABIT:  |  |                                   |
| 1 1 = Winter 2 = Semi-Winter  | 3 = Spring   |                                   |
| 2 Juvenile Growth: 1 = Prostrate  | 2 = Semi-Prostrate 3 = Erect                               | •                                 |
| 3. MATURITY: (50% Flowering) based on data fro  | om the 2004 and 2005 USDA Uniform Winter Oat Yield         | Nursery across the region         |
| 107 Number of days  |  |                                   |
| No. Days Earlier Than * Same as Check * Harrison  |  |                                   |
| 0.4 No. of Days Later Than * TAMO 39  | 07<br>arly (Jaycee) 2 = Early (Nodaway 70) 3 = Mid-Seaso   | on (Olimbford)                    |
|   | odi) 5 = Very Late (Gerry) 6 = Extremely Late (Mack        | on (Clintrord)<br>kinaw)          |
| 4. PLANT HEIGHT: (From Soil Level to Top of Hea   | id) based on data from the 2004 and 2005 USDA Uni          | form Winter Oat Yield Nursery     |
| 105 cm Tall   |  |                                   |
| 03 cm Shorter Than * Harrison   |  |                                   |
| Same as Check *   | · ····   |                                   |
| cm Taller Than *  |  |                                   |
|   |  |                                   |

\* Relative to a Commercial Variety Grown in the Same Trial

|        |             |  |                             | ***                          |   |              |
|--------|-------------|--|-----------------------------|------------------------------|---|--------------|
| 5.     | STEM:       |  |                             |                              |   |              |
|        | 2           | Diameter: 1 = Fine (Kherso   | n) 2 = Medium               | (Clintford) 3 = Co           | arse (Nodaway 70)                         |              |
|        | 2           | Hairiness at Upper Culm Nodes: 1                                       | = Hairless 2 = Hairy        |                              |   |              |
|        | 1           | Mature Stem Color 1 = Yellow 2   | = Reddish                   |                              |   |              |
| 6.     | LEAF: (L    | Leaf Color: The Royal Horticultural Socie ariety.) dark green approxim | ty's or any recognized co   | lor chart should be used to  | o determine the leaf color of             | he described |
|        | 2           | Carriage: 1 = Drooping (Random)  | 2 = Erect (Walken)          |                              |   |              |
|        | 3           | Color: 1 = Yellow-Green  | 2 = Light Green             | 3 = Dark Green 4             | = Blue-Green                              |              |
|        | 2 3         | mm Width (First leaf below flag leaf)                                  | 1 Leaf M                    |                              |   |              |
|        | 2           | Ligule: 1 = Absent 2 = Pre   |                             | •                            |   |              |
|        | <u></u>     | Ligate. 1 - About 2 - Fie  |                             | heath: 1 = Hairless          | 2 = Hairy                                 |              |
| 7.     | HEAD:       |  |                             |                              |   |              |
|        | 1           | Panicle Shape: 1 = Equilateral 2                                       | = Intermediate 3 = \$       | Side Panicle (Unilateral)    |   |              |
|        | 1           | Attachment of Lower Whorl of Branches                                  | 1 = First Node              | 2 = Second Node (False       | Node)                                     |              |
|        | 2           | Panicle Size: 1 = Samll (Yancey)                                       | 2 = Medium (Walke           | n) 3 = Large (Markton)       |   |              |
|        | 1           | Panicle Width: 1 = Narrow (Gopher                                      | ) 2 = Midbroad (Yanc        | y) 3 = Broad (Nodaway        | <i>,</i> 70)                              |              |
|        | 2 2         | cm Panicle Length  | 2 6 Number of Branci        | hes 0 7 Nu                   | imber of Whorls of Branches               |              |
|        | 1           | Position of Branches:  | = Ascending (Yancey)        | 2 = Spreading (Ca            |   | ng (Markton) |
|        | <del></del> |  | = Pectinate (White Tarter)  | 5 = Confused (Sto            | orm King                                  | ng (Markton) |
| 8.     | RACHIS:     |  |                             |                              | ,   |              |
|        |             | 4 - Desumed Ofenses  |                             | ]                            |   |              |
|        |             |  | ct (Walken) 2 • L0          |                              | Rachilla Segment Length                   |              |
|        | _1          |  | = Hairless                  | achilla Hairs: 1 = Short     | 2 = Long                                  |              |
| _      |             |  |                             |                              |   |              |
| 9.     | SPIKELE     |  |                             |                              |   |              |
|        | [2]         | Spikelet Separation by: 1 = Abscission                                 | on 2 = Semi-Absciss         | ion 3 = Fracture             |   |              |
|        | 2           | Floret Separation by: 1= Disarticul                                    | ation 2 = Heterofracture    | 3 = Basifracture             | •   |              |
|        | 2.0         | Florets per Spikelet (Mean no.)  |                             |                              |   |              |
| <br>10 | GLIMES      | S: (Glume Color: The Royal Horticultural                               | Society's or any roceani    | zod salar abart abauld ba    | read to determine the leaf of             | lor of the   |
|        |             | described variety.)  | Coolety 3 of any recogniz   | ed color chart should be     | used to determine the leaf of             | nor or the   |
|        | 0 9         | mm Width 18 mm Length  | 1 0 No. of Vei              | ns on Glumes                 | 2 Color: 1 = White                        | 2 = Yellow   |
|        |             |  |                             |                              | 3 = Red                                   | 4 = Striped  |
| 11.    | LEMMA       | : (Lemma Color: The Royal Horticultura                                 | Il Society's or any recogni |                              | used to determine the leaf                | olor of the  |
|        | 1 2         | described variety.)  | 2                           | RHS 161A                     |   |              |
|        |             | mm Length  |                             | Color: 1 = White<br>4 = Gray | 2 = Yellow 3 = Red<br>5 = Black           |              |
|        |             | Hairiness of Dorsal Surface: 1 = Hair                                  | less 2 = Hairy              | ·                            |   |              |
|        |             |  | •                           |                              |   |              |
| 12.    | AWN: (Fi    | irst Floret)   |                             |                              |   |              |
|        | 1           | Occurrence: 1 = Absent (Walken)<br>2 = Infrequent (Yanc                | ev)                         | Туре:                        | 1 = Non-Twisted<br>3 = Twisted Geniculate | 2 = Twisted  |
|        |             | 3 = Common (Chiloc<br>4 = Frequent (Rando                              | co)                         | mm Awn Length                | Comodiate                                 |              |
|        |             | Frequent (Nando  | ,                           |                              |   | $\sim$       |

| 13                                      | SEED:   | Florescence Under Ultr  | -   | scent 2 = Nor             | ı-Florescent                                  |                          |
|---|---|---|---|---------------------------|---|--------------------------|
|   | _ 1   | Basal Hair:   | 1 = Absent (Florida 501)<br>4 = Several to Numerous (Flor | 2 = Abs<br>rilee) 5 = Nun | ent to Few (Yancey)<br>nerous (Red Rustproof) | 3 = Few to Several (Lee) |
|   | 3 6 •   | mm Basal Hair Length  O gms per 1000 See  5 % Groat Protein * | ds 7  | 2 5 mg Gro                | at Weight (each)<br>t Oil* * based on US      | SDA UWOYN data           |
| 14.                                     | INSECTS   | : (0 = Not Tested 1 = Su                                      | usceptible 2 = Resistant)                                 |                           |   |                          |
|   | <b>=</b>  | ereal Leaf Beetle   | 0 Bluegrass Billbug                                       | 0 Grain Bug (C            | . Sayi) Nema                                  | tode (Type)              |
|   | 0 G   | reen Bug (Biotype)  |   | Other (S                  | Specify)                                      |                          |
| 15.                                     | DISEASE   | : (0 = Not Tested 1 = Su                                      | sceptible 2 = Resistant)                                  |                           |   | 3                        |
|   | - =   | alo Blight 0  | Powdery Mildew 0  | Septoria Leaf Blot        | ch Soil-Borne                                 | Mosaic Virus             |
|   |   | elminthosporium 0<br>Leaf Blotch                              | Yellow Dwarf Virus 0                                      | Victoria Blight           | Other (Spec                                   | cify)                    |
|   | Sp  | ecify Races Tested  | Races Susceptible   | е                         | Rad   | es Resistant             |
| •                                       | 2 Cro   | own Rust *  |   |                           | Field reaction                                | n – races not known      |
|   | 2 Ste   | em Rust *   | NA29+Pga NA67+I   | Pga                       | NA29  |                          |
|   | 0 00  | vered Smut  | - 176-01-   |                           |   |                          |
|   | 0 Loc   | ose Smut  | 700.00 · · · · · · · · · · · · · · · · ·                  |                           |   |                          |
| * based on USDA UWOYN 04 and 05 reports |   |   |   |                           |   |                          |
| 16                                      | 16. INDICATE THE VARIETY YOU BELIEVE MOST CLOSELY TO RESEMBLE THAT SUBMITTED: |   |   |                           |   |                          |
|   | С   | HARACTER  | VARIETY   | С                         | HARACTER                                      | VARIETY                  |
| F                                       | Plant Tillerin  | ng  | Harrison  | Leaf Color                |   | Harrison                 |
| L                                       | eaf Size  |   | Coker 820   | Leaf Carriag              | je  | Harrison                 |

#### COMMENTS:

Seed Color

Seed color of Trophy does not closley match known southern winter oat varieties.

Seed Shape

Horizon 474

## Trophy Oat Exhibit D – Additional Description

**Trophy is a new winter oat variety** that was co-developed by the Louisiana State University Agricultural Center (LSUAC) and Florida Agricultural Experiment Station and is released under the SUNGRAINS cooperative small grain breeding program among five Southeastern Universities. Trophy has considerable potential for grain, forage, conservation tillage, and wildlife purposes in the Southern U.S. Trophy was tested as LA9810SBS-58 oat, hereafter referred to as LA9810 or Trophy. Exclusive marketing rights for Trophy have been licensed to Terral Seed Inc. of Lake Providence, LA. The LSUAC will be the lead institution in this release and Plant Variety Protection will be applied for.

Trophy is a medium height oat with a semi-compact panicle and very large, plump kernels. Seed are medium-deep tan, approximating Royal Horticultural Chart color 161-A. The panicle of Trophy is moderately tight with short, ascending branches. Leaves of Trophy are broad and dark green, with a somewhat upright habit at heading. Trophy had an average height in three years of USDA regional trials of 43", about 1" shorter than the height of Harrison. Trophy had an average height of 43" in three years of Louisiana statewide trials, about 1" taller than Secretariat LA495. The heading date of Trophy is medium. Trophy had a three-year mean heading date in Louisiana of 100 (day of year) compared to 105 for Plot Spike LA9339, 102 for Horizon 321, and 102 for Secretariat LA495. In the 2005 USDA regional trial Trophy had a heading date of 102, 2 days later than TAMO 397 and 1 day earlier than Harrison. Trophy has excellent grain yield, a very high test weight, and very good straw strength. It is resistant to prevalent races of crown and stem rust.

The pedigree history of Trophy is as follows: LA9810 is derived from the cross: LA90120C2-3-AB1/TX96M1558. It was the 10<sup>th</sup> cross made by the LSU AgCenter oat breeding program in 1998. LA90120C2-3-AB1 is an unreleased LSUAC breeding line selected from the original cross X506 made by Howard Harrison of the Coker's Pedigreed Seed Company breeding program and donated to the USDA when that program was closed. LA90120C2-3-AB1 has the pedigree: Coker 75-27/Coker 76-29/3/Coker 76-23//Coker 75-28/CI8336/4/Coker 76-30/Coker 76-29. Coker 76-30 was released and marketed as Southern States 7630 (PVP8200078). TX96M1558 was developed by the Texas A&M oat breeding program under the direction of Dr. Milton McDaniel. It was entry 134 in the 1996-97 REGOAT (Regional Oat Nursery) coordinated by the LSU AgCenter small grains program. It has the pedigree: TX83AB2923/Ga-Mitchell. Ga-Mitchell is a University of Georgia variety released in 1991 (Crop Sci Reg No CV-225, PI549113).

Trophy has performed very well in grain and forage yield trials across the region. It has excellent grain yield and very high test weight. It has been tested in Louisiana statewide trials and in the USDA Uniform Winter Oat Yield Nursery for three years (2003 –05 harvest years). It has the second highest yield across Louisiana for three years, higher than all released varieties and an excellent test weight.

Trophy should be adapted to the region from North Carolina through Arkansas and down into Texas. It is a dual-purpose oat with large seed, broad leaves, and good crown and stem rust resistance.

| REPRODUCE LOCALLY. Include form number and edition date on all   | I reproductions.   | ORM APPROVED - OMB No. 0581-0055                                  |  |  |
|--|--|---|--|--|
| U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE  EXHIBIT E  STATEMENT OF THE BASIS OF OWNERSHIP  | Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). The information is held confidential until the certificate is issued (7 U.S.C. 2426). |   |  |  |
| NAME OF APPLICANT(S)  Board of Supervisors of the Louisiana State University and A&M   | 2. TEMPORARY DESIGNATION<br>OR EXPERIMENTAL NUMBER   | 3. VARIETY NAME   |  |  |
| College; and Florida Agricultural Experiment Station   | LA9810SBS-58   | Trophy  |  |  |
| 4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP, and Country)  | 5. TELEPHONE (Include area code)   | 6. FAX (Include area code)  |  |  |
| LSU AgCenter<br>104 J. Norman Efferson Hall  | (225) 578-2110   | (225) 578-1403  |  |  |
| PO Box 25055   | 7. PVPO NUMBER   |   |  |  |
| Baton Rouge, LA 70894  |  | #200700421  |  |  |
| 8. Does the applicant own all rights to the variety? Mark an "X" in the  | e appropriate block. If no, please expla   | in. YES NO  |  |  |
| 9. Is the applicant (individual or company) a U.S. national or a U.S. b  | pased company? If no, give name of co  | ountry. YES NO  |  |  |
| 10. Is the applicant the original owner? YES   | NO If no, please answer one  | of the following:   |  |  |
| a. If the original rights to variety were owned by individual(s), is (  YES  b. If the original rights to variety were owned by a company(ies),  YES   | NO If no, give name of count   | ry<br>sed company?  |  |  |
| 11. Additional explanation on ownership (Trace ownership from origin Licensed to Terral Seed Inc. for exclusive marketing  | nal breeder to current owner. Use the re   | everse for extra space if needed):                                |  |  |
| PLEASE NOTE:   |  |   |  |  |
| Plant variety protection can only be afforded to the owners (not licens  | sees) who meet the following criteria:   |   |  |  |
| If the rights to the variety are owned by the original breeder, that penational of a country which affords similar protection to nationals of  | erson must be a U.S. national, national of the U.S. for the same genus and speci   | of a UPOV member country, or es.                                  |  |  |
| <ol><li>If the rights to the variety are owned by the company which employ<br/>nationals of a UPOV member country, or owned by nationals of a c<br/>genus and species.</li></ol>   | ved the original breeder(s), the company<br>country which affords similar protection t   | must be U.S. based, owned by o nationals of the U.S. for the same |  |  |
| 3. If the applicant is an owner who is not the original owner, both the original owner and the applicant must meet one of the above criteria.  |  |   |  |  |
| The original breeder/owner may be the individual or company who dir Act for definitions.   | rected the final breeding. See Section 4   | 1(a)(2) of the Plant Variety Protection                           |  |  |
| According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, control number. The valid OMB control number for this information collection is 0581-0055, including the time for reviewing the instructions, searching existing data sources, gathering a | The time required to complete this information collec-   | tion is estimated to average 0.1 hour per response                |  |  |

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To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, D.C. 20250-9410 or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity provide and employer.

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> U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE SCIENCE AND TECHNOLOGY PLANT VARIETY PROTECTION OFFICE BELTSVILLE, MD 20705

**EXHIBIT F** 

|  | DECLARATION REGARDING DEPOSIT   |                                       |  |
|--|---|---------------------------------------|--|
| NAME OF OWNER (S)  | ADDRESS (Street and No. or RD No., City, State, and Zip Code and Country) | TEMPORARY OR EXPERIMENTAL DESIGNATION |  |
| Board of Supervisors of the Louisiana State<br>University and A&M College; and Florida | LSU -School of Plant, Soil, Envtl Sciences                                | LA9810SBS-58                          |  |
| Agricultural Experiment Station  | 104 MB Sturgis Hall<br>Baton Rouge, LA 708-03                             | VARIETY NAME Trophy                   |  |
| NAME OF OWNER REPRESENTATIVE (S)   | ADDRESS (Street and No. or RD No., City, State, and Zip Code and Country) | FOR OFFICIAL USE ONLY 5               |  |
| Dr. Stephen A. Harrison  | LSU -School of Plant, Soil, Envtl Sciences<br>104 MB Sturgis Hall         | PVPO NUMBER                           |  |
|  | Baton Rouge, LA 708-03  | 200760421                             |  |

I do hereby declare that during the life of the certificate a viable sample of propagating material of the subject variety will be deposited, and replenished as needed periodically, in a public repository in the United States in accordance with the regulations established by the Plant Variety Protection Office.

8/24/2007